UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.                               | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/086,313                                    | 02/28/2002  | David Kammer         | PALM-3749.US.P      | 2769             |
| 7590 02/21/2008<br>WAGNER, MURABITO & HAO LLP |             |                      | EXAMINER            |                  |
| Third Floor                                   |             |                      | JEAN GILLES, JUDE   |                  |
| Two North Market Street San Jose, CA 95113    |             |                      | ART UNIT            | PAPER NUMBER     |
| <b></b>                                       |             |                      | 2143                |                  |
| •   |             |                      |                     |                  |
|   |             |                      | MAIL DATE           | DELIVERY MODE    |
|   |             |                      | 02/21/2008          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|  |   | MU  |  |  |  |
|--|---|---|--|--|--|
|  | Application No.   | Applicant(s)  |  |  |  |
|  | 10/086,313  | KAMMER ET AL.   |  |  |  |
| Office Action Summary  | Examiner  | Art Unit  |  |  |  |
|  | Jude J. Jean-Gilles   | 2143  |  |  |  |
| The MAILING DATE of this communication appeared for Reply  | ppears on the cover sheet with  | the correspondence address  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory perio  - Failure to reply within the set or extended period for reply will, by statu. Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b). | DATE OF THIS COMMUNICA  1.136(a). In no event, however, may a reply d will apply and will expire SIX (6) MONTHS ate, cause the application to become ABAN | TION. be timely filed from the mailing date of this communication. DONED (35 U.S.C. § 133). |  |  |  |
| Status   |   |   |  |  |  |
| 1) Responsive to communication(s) filed on 31  | October 2007.   |   |  |  |  |
| ·—   | ·—  |   |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.   |   |   |  |  |  |
| closed in accordance with the practice under   | · <i>Ex рапе Quayle</i> , 1935 С.D. 1   | 1, 453 O.G. 213.  |  |  |  |
| Disposition of Claims  |   |   |  |  |  |
| 4) ⊠ Claim(s) 1-28 is/are pending in the application 4a) Of the above claim(s) is/are withdr 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-9,11-20 and 22-28 is/are rejected 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and  | rawn from consideration.  |   |  |  |  |
| Application Papers   |   |   |  |  |  |
| 9) The specification is objected to by the Examir 10) The drawing(s) filed on 28 February 2002 is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the I   | are: a) $\square$ accepted or b) $\square$ objusted drawing(s) be held in abeyance ection is required if the drawing(s)                                   | . See 37 CFR 1.85(a).<br>is objected to. See 37 CFR 1.121(d).                               |  |  |  |
| Priority under 35 U.S.C. § 119   |   |   |  |  |  |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bure * See the attached detailed Office action for a list   | nts have been received.<br>nts have been received in App<br>iority documents have been re<br>au (PCT Rule 17.2(a)).                                       | lication No ceived in this National Stage   |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)   |   | mary (PTO-413)  |  |  |  |
| <ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO/SB/08)</li> <li>Paper No(s)/Mail Date 01/04/2008.</li> </ul>   |   | lail Date<br>mal Patent Application   |  |  |  |

### **DETAILED ACTION**

Page 2

This Action is in regards to the Reply received on 10/31/2007.

### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/31/2007 has been entered.

### Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 01/04/2008 was filed after the mailing date of the Final Office Action dated 08/21/2007. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

Application/Control Number: 10/086,313 Page 3

Art Unit: 2143

## Allowable Subject Matter

3. Claims 10 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

# Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1-9, and 11-20, and 22-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heinonen et al (hereinafter Heinonen) U.S. Patent No. 7,151,764 B1 in view of Kobayashi U.S. Patent No. 5,724,346.

Regarding claim 1: Heinonen discloses the invention substantially as claimed.

Heinonen teaches a method of connecting to a wireless communication access point (fig. 1) comprising:

- a) an initiator device broadcasting a first wireless message to a
  plurality of potential access point devices, said initiator device storing therein a
  list of recognized device addresses for connecting thereto (fig. 4A-C; column 13, lines
  60-67; column 14, lines 1-30; Note that the first message is the inquiry package 500);
  - b) in response to said initiator device broadcasting said first wireless

Application/Control Number: 10/086,313

Art Unit: 2143

message, said initiator device receiving a plurality of second wireless messages from a set of said plurality of potential access point devices, wherein said set of said plurality of potential access point devices is defined by at least one physical characteristic (column 13, lines 60-67; column 14, lines 1-30; the second wireless message here is the inquiry packet 510; and the one physical characteristic here is either the access in the address field 520 or the CoD value in the device field 522);

- c) said initiator device comparing device addresses of said plurality of second wireless messages for address matches with said list of recognized device addresses (column 9, lines 25-50);
- e) connecting-transmitting a signal to connect to an access point device corresponding to said single address (column 9, lines 25-50; column 12, lines 1-17); however Heinonen does not disclose in details the step of: d) applying a fitness function to address matches of said c) to determine a single address, wherein said fitness function defines an acceptable criteria for determining said single address.

In the same field of endeavor, Kobayashi discloses a"...wireless sending/receiving function or a fitness function capable of defining criteria for controlling absence/presence of user stations based on an address from an address table, registering the terminals (see Kobayashi, column 9, lines 40-47;; fig. 2). Further, in the Reply dated 10/31/2007; Applicants argue that steps (a)-(d) are directed to identifying the access point such that the wireless device can connect to, which occurs before initiating a connection to the access point. Kobayashi corrects the deficiencies of Heinonen in that Kobayashi teaches "a system wherein the user station is provided"

with means for searching for a connectable access point before connection to the new access point is necessary, a master-station management table for holding the address of the connectable access point" see Kobayashi column 4, lines 25-40. In addition Kobayashi teaches broadcasting messages to access points in lines 53-64 column 12. For a address comparison, Kobayashi discloses a device that compares addresses prior to applying the function (see Kobayashi, lines 20-30 of column 21).

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Kobayashi's teachings of the fitness function, with the ability to compare device addresses with the teachings of Heinonen, for the purpose of improving the ability of a network to exchange frames wirelessly between access points (column 1, lines 8-23). By this rationale, **claim 1** is rejected.

Regarding claims 2-9, 11-20, and 22-27, the combination Heinonen – Kobayashi discloses:

- 2. (Currently Amended) The method as described in Claim 1 wherein set of said physical characteristic is defined by a quantity of device threshold (see Heinonen; column 13, lines 60-67; column 14, lines 1-30).
- 3. (Currently Amended) The method as described in Claim 1 wherein set of said physical characteristic is defined by a time of discovery threshold (see Heinonen; column 7, lines 24-62; column 14, lines 1-30).
  - 4. (Currently Amended) The method as described in Claim 1 wherein

said criteria is an occupancy level less than a predetermined threshold (see Heinonen; column 7, lines 24-62; column 14, lines 1-30).

- 5. (Currently Amended) The method as described in Claim 1 wherein said criteria is signal strength greater than a predetermined threshold(see Heinonen; column 7, lines 24-62; column 14, lines 1-30).
- 6. (Currently Amended) The method as recited in Claim 1 wherein said criteria is residing within a predetermined physical distance (see Heinonen; column 5, lines 53-67; column 13, lines 60-67; column 14, lines 1-30;).
- 7. (Original) The method as recited in Claim 1 wherein said initiator device and said responding device are Bluetooth-enabled devices (see Heinonen; items 100, 140 and 180; column 5, lines 53-67).
- 8. (Original) The method as recited in Claim 1 wherein said access point device is coupled to a network comprising a network server (see Heinonen; items 100, 140 and 180; column 5, lines 53-67).
- 9. (Original) The method of Claim 8 wherein a list of all current network access point addresses is maintained on said network server (see Heinonen; items 100, 140 and 180; column 5, lines 53-67).
- 11. (Original) The method of Claim 9 wherein said initiator device abstracts said list of access point addresses into a single abstract name (see Heinonen; column 13, lines 60-67; column 14, lines 1-30).
- 12. (Currently Amended) A wireless communication device (see Heinonen; fig. 1A-C, 2A) comprising:

Application/Control Number: 10/086,313

Art Unit: 2143

a bus (see Heinonen; fig. 1A-C, 2A);

a wireless transceiver unit coupled to said bus for communicating with responding devices (see Heinonen; fig. 1A-C, 2A);

a memory cache coupled to said bus (see Heinonen; fig. 1A-C, 2A); and a processor coupled to said bus, said processor for performing a method for selecting and connecting to a responding access point device (see Heinonen; fig. 1A-C, 2A), said method comprising:

- a) an initiator device broadcasting a first wireless message to a plurality of potential access point devices, said initiator device storing therein a list of recognized device addresses for connecting thereto (see Heinonen; fig. 4A-C; column 13, lines 60-67; column 14,lines 1-30; *Note that the first message is the inquiry package 500*);
- b) in response to said initiator device broadcasting said first wireless message, said initiator device receiving a plurality of second wireless messages from a set of said plurality of potential access point devices, wherein said set of said plurality of potential access point devices is defined by at least one physical characteristic (see Heinonen; fig. 4A-C; column 13, lines 60-67; column 14, lines 1-30);
- c) said initiator device comparing device addresses of said plurality of second wireless messages for address matches with said list of recognized device addresses (see Heinonen; column 9, lines 25-50);
- d) applying a fitness function to address matches of said c) to determine a single address, wherein said fitness function defines an acceptable

Page 8

criteria for determining said single address (see Kobayashi, lines 20-30 of column 21; column 4, lines 25-40), and

- e) connecting transmitting a signal to connect to an access point device corresponding to said single address, wherein said initiator device is said wireless communication device(see Kobayashi, lines 20-30 of column 21; column 4, lines 25-40).
- 13. (Currently Amended) The method device as described in Claim 12 wherein set of said physical characteristic is defined by a quantity of device threshold.
- 14. (Currently Amended) The method device as described in Claim 12 wherein set of said physical characteristic is defined by a time of discovery threshold (see Heinonen; column 7, lines 24-62; column 14, lines 1-30).
- 15. (Currently Amended) The method device as described in Claim 12 wherein said criteria is an occupancy level less than predetermined threshold (see Heinonen; column 7, lines 24-62; column 14, lines 1-30).
- 16. (Currently Amended) The device as described in Claim 12 wherein said criteria is signal strength greater than a predetermined threshold (see Heinonen; column 7, lines 24-62; column 14, lines 1-30).
- 17. (Currently Amended) The method device as recited in Claim 12 wherein said criteria is residing within a predetermined physical distance (see Heinonen; column 5, lines 53-67; column 13, lines 60-67; column 14, lines 1-30).
- 18. (Currently Amended) The method device as recited in Claim 12 wherein said initiator device and said responding device are Bluetooth-enabled

Application/Control Number: 10/086,313

Art Unit: 2143

devices (see Heinonen; items 100, 140 and 180; column 5, lines 53-67).

- 19. (Currently Amended) The method device as recited in Claim 12 wherein said access point device is coupled to a network comprising a network server (see Heinonen; items 100, 140 and 180).
- 20. (Currently Amended) The method device of Claim 19 wherein a list of all current network access point addresses is maintained on said network server (see Heinonen; items 100, 140 and 180).
- 22. (Currently Amended) The method device of Claim 20 wherein said initiator device abstracts said list of access point addresses into a single abstract name (see Heinonen; column 13, lines 60-67; column 14, lines 1-30).
- 23. (Currently Amended) In a wireless communication device having a wireless transceiver and a memory cache comprising a list of access point addresses, a method for updating said list of access point addresses comprising:
- a) connecting said wireless communication device with a network server, said network server comprising a list of current network access point addresses for a network(see Heinonen; fig. 4A-C; column 13, lines 60-67; column 14, lines 1-30);
- b) comparing said list of access point addresses on said memory cache to said list of current network access point addresses (see Heinonen; column 9, lines 25-50);
- c) in response to said comparing, adding to said list of access point addresses in said memory cache of said wireless communication device any

addresses found on said list of current network access point addresses and not found on said list of access point addresses(see Heinonen; column 9, lines 25-50); and

- d) in response to said comparing, deleting from said list of access point addresses in said memory cache of said wireless communication device any addresses not found on said list of current network access point addresses and found on said list of access point addresses (see Kobayashi, lines 20-30 of column 21; column 4, lines 25-40).
- 24. (Original) The method as recited in Claim 23 wherein said wireless communication device is a Bluetooth-enabled device (see Heinonen; items 100 and 140).
- 25. (Original) The method as recited in Claim 23 wherein connecting said wireless communication device with a network server comprises connecting through an access point (see Heinonen; item 180);
- 26. (Original) The method as recited in Claim 23 wherein said access point is a Bluetooth enabled device (see Heinonen; items 100, 140 and 180).
- 27. (Original) The method as recited in Claim 23 wherein said wireless communication device is a portable computer system (see Heinonen; column 5, lines 53-67; column 13, lines 60-67).
- 28. (new) the method as described in claim 1 further comprising: connecting to said access point device corresponding to said single address addresses (see Kobayashi, lines 20-30 of column 21; column 4, lines 25-40).

Application/Control Number: 10/086,313 Page 11

Art Unit: 2143

### Conclusion

6. Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914. The examiner can normally be reached on Monday-Thursday and every other Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn, can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is (571) 272-3201.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-0800.

Jude Jean-Gilles

Patent Examiner

Art Unit 2143

February 17, 2008